

SOLID WASTE FACILITY PERMIT

1. Facility Permit Number:
34-AA-0001

2. Name and Street Address of Facility:
KIEFER LANDFILL
12701 Kiefer Blvd
Sloughouse, California

3. Name and Mailing Address of Operator:
Sacramento Co. Public Works Agency
Waste Mgmt and Recycling Division
9850 Goethe Rd,
Sacramento, CA 95827

4. Name and Mailing Address of Owner:
Sacramento Co. Public Works Agency
Waste Mgmt and Recycling Division
9850 Goethe Rd,
Sacramento, CA 95827

5. Specification:

a. Permitted Operations:

<input type="checkbox"/> Composting Facility (mixed waste)	<input type="checkbox"/> Processing Facility
<input type="checkbox"/> Composting Facility (yard waste)	<input type="checkbox"/> Transfer Station
<input checked="" type="checkbox"/> Landfill Disposal Site	<input type="checkbox"/> Transformation Facility
<input type="checkbox"/> Material Recovery Facility	<input type="checkbox"/> Other:

b. Permitted Hours of Operations: 6:30 a.m.-4:30 p.m. M-F open to the public
8:30 a.m.-4:30 p.m Sat - Sun. Open to the public.
Staging of transfer vehicles 24 hours/day 365 days/year.

c. Permitted Tons per Operating Day:

	<u>10,815 Maximum</u>	Tons/Day (see Section 17 Condition 26)
	<u>6362 (Average)</u>	Tons/Day (See Section 17 Condition 26)
Non-Hazardous - General	<u>Any within total</u>	Tons/Day
Non-Hazardous - Sludge	<u>See Section 17 Condition 23</u>	
Non-Hazardous - Separated or commingled recyclable	<u>Any within total</u>	Tons/Day
Non-Hazardous - Other	<u>Any within total</u>	Tons/Day
Designated	<u>0</u>	Tons/Day
Hazardous	<u>0</u>	Tons/Day

d. Permitted Traffic Volume:

	<u>744</u>	Vehicles/Day
Incoming waste materials	<u>Any within total</u>	Vehicles/Day
Outgoing waste materials (for disposal)	<u>Any within total</u>	Vehicles/Day
Outgoing materials from material recovery operation	<u>Any within total</u>	Vehicles/Day

e. Key Design Parameters (Detailed parameters are shown on site plans bearing LEA and CIWMB validations):

	Total	Disposal footprint	Transfer Station	MRF	Composting	Transformation
Permitted Area (in acres)	1084	660	None	None	None	None
Design Capacity		117.4 million Cu/yds	None	None	None	None
Max. Elevation (Ft. MSL)		325				
Max. Depth (Ft. MSL)		100				
Estimated Closure Date		2035				

The permit is granted solely to the operator named above, and is not transferable. Upon a change of operator, this permit is no longer valid. Further, upon a significant change in design or operation from the described herein, this permit is subject to revocation or suspension. The attached permit findings and conditions are integral parts of this permit and supersede the conditions of any previous issued solid waste facility permits.

6. Approval:


Approving Officer Signature

James Cermak, R.E.H.S., Supervising Environmental Health Specialist

7. Enforcement Agency Name & Address:

Sacramento County
Environmental Management Department
8475 Jackson Road, Suite 240
Sacramento, CA 95826

8. Received by CIWMB:

FEB 25 1999

9. CIWMB Concurrence Date:

MAY 7 1999

10. Permit Review Due Date:

MAY 10, 2004

11. Permit issued Date:

MAY 10, 1999

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12. Legal Description of Facility (attach map with RFI):

APN 126-090-01,02,16,17,18,19,20,21 Fifteen miles East of Sacramento, one mile North of Sloughouse in Sections 22,26,27,34 and 35, T8N, R7E, MDB & M.

13. Findings:

- a. This permit is consistent with standards adopted by the California Integrated Waste Management Board (CIWMB). Public Resources Code, Section 44010.
- b. A Notice of Determination has been filed with the State Clearinghouse (schedule # 92052096).
- c. A County-wide Integrated Waste Management Plan was approved by the CIWMB on May 27, 1998.
- d. The Planning and Community Development Department and the LEA have determined that the facility is consistent with, and designated in, the 1993 Sacramento County General Plan. Public Resources Code, Section 50000.5(a).
- e. The Director of the Planning and Community Development Department has made a written finding on 9-6-95 that the surrounding land use is compatible with the disposal facility operation, as required in Public Resources Code, Section 50000.5(b).
- f. The design and operation of the facility is in compliance with the State Minimum Standards for Solid Waste Disposal.

14. Prohibitions:

The permittee is prohibited from accepting any liquid waste that is less than 50% solid by weight, designated waste, or hazardous waste unless such waste is authorized by all applicable permits. Friable asbestos containing waste is prohibited.

15. The following documents also describe and/or restrict the operation of this facility (insert document date in space):

	Date		Date
[x]RDSI amendment	10/98	[x]Waste Discharge Requirements 95-078	03/95
[x]RDSI	05/95	[x]Prelim./Closure and Post Closure Maintenance Plan	10/98
[x]Land use compliance letter	09/95	[x]Closure / Post Closure Maintenance Fund Statement	10/98
[x]Notice of Determination filing	11/98		
[x]Operating Liability Coverage, CIWMB letter	10/98		

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16. Self Monitoring:

a. Results of all self-monitoring programs as described in the Report of Facility Information, will be reported as follows:

Program	Reporting Frequency	Agency Reported To
1) Calculate the amount of waste received monthly on a per day basis.	Quarterly *	LEA *
2) Log and report all written complaints regarding the facility and the operator's actions taken in response to the complaint. Notify the LEA within one day of the action taken.	Quarterly *	LEA *
3) Log and report all employee and customer injuries.	Quarterly *	LEA *
4) Log and report all unscheduled shutdowns.	Quarterly *	LEA *
5) Log of special or unusual occurrences, i.e. accidents, injury, fires, explosions, hazardous waste incidents, public nuisance incidents, etc and the operator's response to correct the problem.	Quarterly *	LEA *
6) Monthly calculate and report the number of vehicles utilizing the facility per day of operation.	Quarterly *	LEA *
7) Report the results of the daily random waste load checking program.	Quarterly *	LEA *
8) Log and report the types and quantities of prohibited waste found in the waste stream and disposition of these materials.	Quarterly *	LEA *
9) Log the average daily quantity of recycled material stored on site and the amounts shipped off site must be calculated and reported monthly in cubic yards or weight.	Quarterly *	LEA *
10) An employee training log with dates of training, course descriptions, etc, shall be maintained and kept current.	Upon Request of LEA	LEA *
11) Water quality control of contaminants -monitoring, reporting, remediation and related programs including: Waste Discharge Requirements, water SWATs, Clean-up & Abatement Orders/ Work plans/ Remediation Schedules, NPDES Permits.	(per local RWQCB *)	LEA, local California Regional Water Quality Control Board (CRWQCB) *
12) Landfill gas monitoring, reporting, remediation and related programs including: LFG monitoring of all boundary probes and LFG probes in the offsite gas field.	Quarterly *	LEA, (* = Plus reporting to all other local, state and federal regulatory authority with jurisdiction at the facility.)

(* = Reporting due by the 30th of the month following the end of the reporting period, OR else when due as specified by the controlling regulatory authority.)

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17. LEA Conditions:

(NOTE: LEA conditions listed here shall be in addition to conditions of other documents controlling operation of this facility.)

1. The operator shall comply with all State Minimum Standards of Solid Waste Handling and disposal as specified in Title 27 of the California Code of Regulations (CCR). The operator shall not operate this facility without possession of all required permits/ regulatory approvals. The operator shall inspect the site at least once each day of operation to ensure compliance with all applicable standards/ conditions/ mitigation/ permits/ regulations.
2. The operator shall comply with all federal, state, and local requirements and enactments including all mitigation and monitoring measures developed in accordance with any certified environmental document filed pursuant to Public Resources Code Section (PRC) .21081.6, and all administrative/enforcement orders of all regulatory agencies with jurisdiction at this facility.
3. The operator shall maintain a complete copy of this Solid Waste Facilities Permit (SWFP), of all other required regulatory permits and of all regulatory inspection reports, at the facility or other approved location readily accessible to facility personnel, LEA staff and other regulatory personnel.
4. The operator shall notify the LEA in writing (with proposed amendments to the Report of Disposal Site Information (RDSI)), at least one hundred twenty (120) days in advance of proposed significant changes (as determined by the LEA), in the design/ operation of the facility to allow for early consultation, completion of all required documents/ due process review/ filing and the completion of all related permitting processes. Such notification shall include changes (including new additions) of: processing/ composting/ baling/ materials recovery facility (MRF)/ transfer station and/or transformation facility, changes in permitted hours/ days of operation, permitted tons/day per category, permitted traffic volumes/day per category, permitted total area, disposal footprint, maximum elevation, maximum depth of waste, and/or estimated closure year, which may be later proposed for this facility.
5. This facility is authorized to conduct limited salvaging and to store recovered materials (if such salvaging/ storage is properly described in the RDSI or amendments thereto) for brief periods of time (not to exceed thirty (30) days for any category of material) and only in containers as approved by the LEA. Such limited salvaging/ storage shall only be conducted as pre-approved by the LEA to preclude the creation of health hazards or public nuisances. The facility shall not to be used as a materials recovery facility (MRF), processing facility, transfer station and/or transformation facility. Exception: Processing of recyclables may be conducted in accordance with Section 1 of the RDSI dated May 1995, and the RDSI amendment dated October 1998. Processing of recyclables other than as approved would require LEA notification and approval.
6. The LEA reserves the right to suspend and/or modify operations at this facility when deemed necessary due to any emergency, potential health hazard, and/or public nuisance.
7. Additional information concerning the design/ operation of this facility shall be furnished upon request to the LEA and other regulatory personnel.
8. This SWFP is subject to review by the LEA and may be suspended, revoked or modified at any time for sufficient cause.
9. As outlined in Section 16, the operator shall maintain at the facility, or other approved location, accurate daily records of the tonnage/day and number of vehicles/day per: incoming solid waste, outgoing recovered material (per category); and an estimate (by weight, volume or count) of the total amount of recovered material (per category) stored on-site for brief periods of time. Such records shall be readily accessible at the facility to the LEA/ other regulatory personnel. A written summary of such tons/day per category, vehicles/day per category, and estimates/day per category, shall be furnished quarterly to the LEA within thirty (30) days of the end of each quarter.
10. As outlined in Section 16, the operator shall furnish a written summary of all written complaints (including all regulatory notices such as: Notices of Violation, Notice and Orders, Clean-up & Abatement Orders) concerning the facility received by the operator during a quarter, and the operator's responses/ corrective actions taken, to the LEA within thirty (30) days of the end of each quarter.
11. As outlined in Section 16, the operator shall maintain at the facility, or other approved location, a log of special/unusual occurrences (S/U O). The log shall include, but not be limited to: fires, explosions, discharges of unusual waste, significant incidents of personal injury, accidents and/or property damage. Each log entry shall be accompanied by a summary of the responses/ corrective actions taken by the operator to mitigate any negative impacts of each occurrence. Days without incidents of S/U O shall be noted with an appropriate negative entry for such days such as: "No S/U O today". The operator shall maintain this log at the facility or other approved location in a manner readily accessible to facility personnel and to the LEA/ other regulatory personnel. A written summary of the log entries during a quarter shall be furnished to the LEA within thirty (30) days of the end of each quarter.

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17. LEA Conditions (continued):

12. The operator shall maintain an LEA approved hazardous/ PCB/ prohibited waste screening/ exclusion (load checking) program at the facility which will adequately protect public health and the environment from illegal on-site disposal of hazardous/ PCB/ prohibited wastes. On site load checking shall occur at all times by personnel trained in such activities. Signs, brochures, and/or other appropriate communication measures shall be utilized by the operator to direct site users to the nearest Household Hazardous Waste (HHW) collection facility, and inform site users of pending HHW Round-up activities scheduled for communities within the sites waste-shed. A written summary of all program activities/ results during a quarter, shall be furnished to the LEA within thirty (30) days of the end of each quarter.
13. The active disposal cell (tipping area) shall be at all times sufficiently surrounded by portable litter-control fencing and supported with sufficient litter picking personnel, to preclude significant amounts of litter from accumulating off-site. On-site and off-site litter shall not be allowed to accumulate. The operator shall maintain a high winds operations policy and the facility shall be operated in accordance with this policy.
14. At all times, the site perimeter shall be provided with adequate security gates and fencing in good repair (or equivalent effective barriers).
15. Waste and cover material shall be spread and compacted utilizing methods to maximize compaction and to decrease the attraction of animals, birds and vectors to the site. Personnel shall not secure the site each day until the operator's inspection confirms that at least six (6) inches of compacted cover has been deposited over all waste and sufficient to prevent such attraction. On-site litter shall not be allowed to accumulate, so as to create such an attraction. Exception: The landfill is currently utilizing geosynthetic tarps and green waste as an alternative daily cover (ADC). Use of this material to provide daily cover shall constitute compliance with this condition provided the material is used in accordance with 27 CCR 20690 and is used as described in the RDSI.

In addition, the following conditions concerning the use of ADC materials shall be observed:

- A. Any proposals for the Use of ADC in addition to the materials noted above, shall be reviewed and approved by the LEA and the CIWMB prior to implementation in accordance with 27 CCR 20690.
- B. If and when any proposed plans for ADC are submitted to the LEA/CIWMB for demonstration in accordance with 27 CCR 20690 (10) (b), it will include appropriate consultation with the RWQCB to insure that any such use of ADC is consistent with RWQCB requirements.
16. The operator shall take immediate and independent action to prevent and suppress fires on the project area. The facility shall be maintained with a clearance of flammable material for a minimum distance of one hundred fifty (150) feet from the periphery of any exposed flammable solid waste, or additional minimum flammable clearance provisions determined by the local fire protection agency.
17. The operator shall properly equip and maintain noise attenuation and spark arrestor devices (such as mufflers) on all combustion engines utilized at this facility. All equipment components shall be maintained in good mechanical condition and properly operated to prevent excessive noise levels and circumstances capable of starting accidental fires.
18. The operator shall provide final cover over all areas in accordance with the Preliminary Closure and Post Closure Maintenance Plan approved by the LEA and other duly authorized regulatory agencies. Where and when final elevation has been attained or a discrete segregated area of the site can no longer receive waste, final cover shall also be provided.
19. Site entry signs shall prominently display all required regulatory information.
20. If required to be installed, all appropriate water treatment facility permits and associated well permits must be properly secured with copies submitted to the LEA.

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17. LEA Conditions (continued):

21. The operator shall maintain an adequate vector monitoring/ control program with updates as directed by the LEA.
22. Wastes containing liquids, including "grits and screenings" from the Sacramento Regional Wastewater Treatment Plant, may not be accepted at this disposal facility except as allowed by the discharge requirements established by the RWQCB which is the lead agency that regulates such discharges. The LEA maintains the right to restrict or prohibit any material which by the result of moisture or any other characteristic that prevents proper disposal and cover of the solid wastes.
23. The site has been designated as an emergency back up alternative for the disposal of biosolids from the Sacramento Waste Water Treatment Plant (SRWTP) and may accept these wastes provided the acceptance of this waste is conducted in accordance with the LEA's approval letter dated May 8, 1998.
24. The operator has installed a landfill gas control system in accordance with the July 1995 Landfill Gas Migration Mitigation Work plan. The operator will maintain this system in such a manner that the landfill remains in compliance with 27 CCR 20919 and 20919.5.
25. The operator currently has a corrective action plan designed to assess and mitigate the environmental impacts of an off site landfill gas accumulation (see appendix G of the JTD dated October 1998). The operator will continue to control gas in the off site field in a manner that is consistent with this plan .
26. The operator shall limit the tonnage placed at the facility to the amounts as stated in Table 2 of the amendment to RDSI included as attachment A. of this permit.
27. The following wastes are acceptable for disposal as per the RDSI: Mixed municipal wastes (including commercial and residential waste), non-hazardous industrial wastes (except those having high liquid content (<50% liquid by weight) or other physical properties [i.e. powdery or dusty materials] which could cause health and safety or operational problems without special handling), construction demolition waste, autoclaved infectious waste, dead animals, and empty pesticide containers (provided the containers are triple rinsed).
28. In addition to any other activities identified in Title 27 CCR, the following are specifically prohibited:
 1. Standing water on fill areas.
 2. Vector propagation.
 3. Off-site migration of waste, litter or leachate.
 4. Off-site subsurface migration or onsite structure accumulation of explosive gas.
 5. Any exposed landfilled waste following a daily operation.
 6. Placement of any wastes or cover material at a height exceeding 325 feet MSL.
29. This permit supersedes the solid waste facility permit 34-AA-001 issued 10-18-95.

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FEB 26 1999

Table 2

Long-Term Wastestream and Site Life Projection
Kiefer Landfill

Year	County, Folsom & Oak Annual Tonnage (1,2)	City of Sacramento Annual Tonnage (1,2)	Total Annual Tonnage	Average Daily Tonnage (2)	Peak Daily Tonnage (4)	Estimated Annual Volume (cy) (3)	Cumulative Refuse Volume (cy) (5)
1994/1995	799,800	192,300	992,100	2,718	4,621	1,639,800	21,087,400
1995/1996	824,600	197,300	1,021,900	2,800	4,760	1,689,100	22,776,500
1996/1997	850,100	202,500	1,052,600	2,884	4,903	1,739,800	24,516,300
1997/1998	876,400	207,700	1,084,100	2,970	5,049	1,791,900	26,308,200
1998/1999	903,800	213,100	1,116,900	3,060	5,202	1,846,100	28,154,300
1999/2000	931,800	218,700	1,150,500	3,152	5,358	1,901,700	30,056,000
2000/2001	652,500	224,400	876,900	2,402	4,084	1,449,400	31,505,400
2001/2002	673,000	230,200	903,200	2,475	4,207	1,492,900	32,998,300
2002/2003	693,200	236,200	929,400	2,546	4,329	1,536,200	34,534,500
2003/2004	714,000	242,300	956,300	2,620	4,454	1,580,700	36,115,200
2004/2005	735,400	248,600	984,000	2,696	4,583	1,626,400	37,741,600
2005/2006	757,500	255,100	1,012,600	2,774	4,716	1,673,700	39,415,300
2006/2007	780,200	261,700	1,041,900	2,855	4,853	1,722,100	41,137,400
2007/2008	803,600	268,500	1,072,100	2,937	4,993	1,772,100	42,909,500
2008/2009	827,700	275,500	1,103,200	3,022	5,138	1,823,500	44,733,000
2009/2010	852,500	282,700	1,135,200	3,110	5,287	1,876,400	46,609,400
2010/2011	878,100	290,000	1,168,100	3,200	5,440	1,930,700	48,540,100
2011/2012	904,400	297,600	1,202,000	3,293	5,598	1,986,800	50,526,900
2012/2013	931,600	305,300	1,236,900	3,389	5,761	2,044,500	52,571,400
2013/2014	959,500	313,200	1,272,700	3,487	5,928	2,103,600	54,675,000
2014/2015	988,300	321,400	1,309,700	3,588	6,100	2,164,800	56,839,800
2015/2016	1,018,000	329,700	1,347,700	3,692	6,277	2,227,600	59,067,400
2016/2017	1,048,500	338,300	1,386,800	3,799	6,459	2,292,200	61,359,600
2017/2018	1,079,900	347,100	1,427,000	3,910	6,646	2,358,700	63,718,300
2018/2019	1,112,300	356,100	1,468,400	4,023	6,839	2,427,100	66,145,400
2019/2020	1,145,700	365,400	1,511,100	4,140	7,038	2,497,700	68,643,100
2020/2021	1,180,100	374,900	1,555,000	4,260	7,242	2,570,200	71,213,300
2021/2022	1,215,500	384,600	1,600,100	4,384	7,453	2,644,800	73,858,100
2022/2023	1,252,000	394,600	1,646,600	4,511	7,669	2,721,700	76,579,800
2023/2024	1,289,500	404,900	1,694,400	4,642	7,892	2,800,700	79,380,500
2024/2025	1,328,200	415,400	1,743,600	4,777	8,121	2,882,000	82,262,500
2025/2026	1,368,000	426,200	1,794,200	4,916	8,357	2,965,600	85,228,100

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Table 2

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Long-Term Wastestream and Site Life Projection Kiefer Landfill

Year	County, Folsom & Oak Annual Tonnage (1,2)	City of Sacramento Annual Tonnage (1,2)	Total Annual Tonnage	Average Daily Tonnage (3)	Peak Daily Tonnage (4)	Estimated Annual Volume (cy) (5)	Cumulative Refuse Volume (cy)(6)
2026/2027	1,409,100	437,300	1,846,400	5,059	8,600	3,051,900	88,280,000
2027/2028	1,451,400	448,700	1,900,100	5,206	8,850	3,140,700	91,420,700
2028/2029	1,494,900	460,300	1,955,200	5,357	9,106	3,231,700	94,652,400
2029/2030	1,539,700	472,300	2,012,000	5,512	9,371	3,325,600	97,978,000
2030/2031	1,585,900	484,600	2,070,500	5,673	9,643	3,422,300	101,400,300
2031/2032	1,633,500	497,200	2,130,700	5,838	9,924	3,521,800	104,922,100
2032/2033	1,682,500	510,100	2,192,600	6,007	10,212	3,624,100	108,546,200
2033/2034	1,733,000	523,400	2,256,400	6,182	10,509	3,729,600	112,275,800
2034/2035	1,785,000	537,000	2,322,000	6,362	10,815	3,838,000	116,113,800
2035/2036	1,838,500	551,000	2,389,500	6,547	11,129	3,949,600	120,063,400

Estimated landfill service life for 660-acre footprint based on final grading plan (Drawing 2), which indicates a remaining refuse capacity of approximately 96,842,000 cy as of June 30, 1995. Total refuse capacity of 117,929,400 cy is based on remaining refuse capacity of 96,842,000 cy plus 21,087,400 cy in place at the end of the 1994/1995 fiscal year. (See Table 4)

- 1) AB939 waste stream reduction assumed a 25% reduction in 1994/1995 and an additional 25% reduction in the year 2000/2001 for the City of Oak and the County of Sacramento. It is assumed there will be no further reduction for the City of Sacramento residential waste collection (the City's additional diversion in 2000/2001 will come primarily from yard waste diversion, which is not currently landfilled at Kiefer), and the City of Folsom is already at 50% waste diversion.
- 2) Refuse projections based on composite projection of 3% for the County of Sacramento (including Folsom and Oak starting in fiscal year 2002/2003) and 2.6 % for the City of Sacramento.
- 3) Average Daily Tonnage based on 7-day week.
- 4) Peak daily tonnage based on a peaking factor of 1.7.
- 5) Volume assumes an in-place refuse density of 1,210 pounds per cubic yard (from 1988 EMCON Master Plan for the Kiefer Landfill).
- 6) Starting cumulative refuse of 20,276,000 cubic yards based on estimated volume of refuse placed between July 1967 and November 1994, plus estimated volume of 811,400 cubic yards placed between November 1994 and June 1995.

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